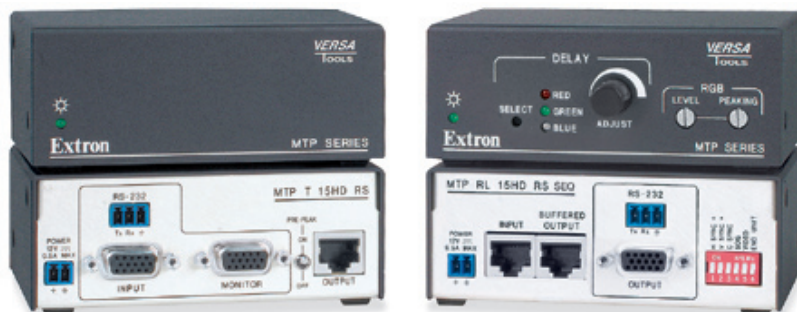


MTP 15HD RS Series

MTP - Mini Twisted Pair Transmitters and Receivers for VGA and RS-232



COMMON FEATURES

- Sends and receives high resolution video and RS-232 signals 600 feet (185 meters) or more over a single UTP cable
- Supports RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, and composite video
- Compatible with HDTV component video, bi-level or tri-level sync
- LED power indicator on front panel
- Rack-mountable, 1U, quarter rack width, rugged metal enclosure
- Versatile mounting options
- External universal power supply included, part # 70-055-01 — Provides worldwide power compatibility.

DESCRIPTION

The Extron **MTP 15HD RS Series** is a versatile family of mini twisted pair transmitters and receivers for transmitting high resolution computer-video and RS-232 serial control signals long distances to presentation displays over a single twisted pair cable. They are compatible with resolutions up to 1600 x 1200 UXGA and will support cable runs of 600 feet (185 meters) or more with XGA signals, and 450 feet (135 meters) or more with UXGA signals.

The MTP 4T 15HD RS Quad MTP – Mini Twisted Pair Transmitter offers four independent transmitters for VGA and bidirectional RS-232 in a single 1U rack-mountable enclosure. MTP 15HD RS transmitters and receivers are ideal for use in applications that requires a cost-effective solution for sending RGBHV, RGBS, HDTV, component video, S-video, and composite video with serial control signals long distances over UTP cable.

Buffered Loop-Through

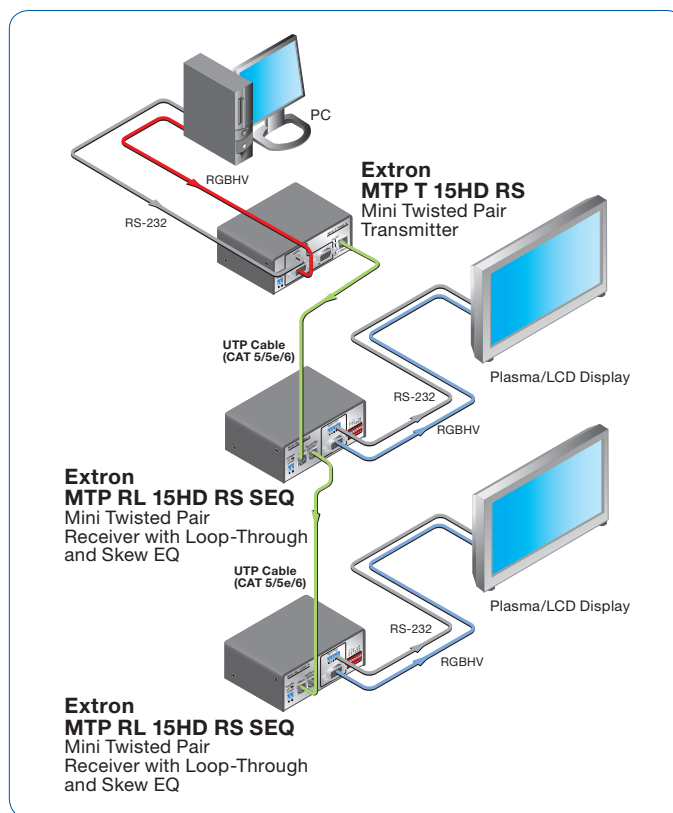
Both receivers feature an added female RJ-45 buffered output, enabling up to eight receivers to be connected in series, reducing the number of parallel cable runs required. Each receiver model also offers separate variable level and peaking adjustments that precisely optimize image quality for various cable lengths.

Integrated Skew Equalization

The MTP RL 15HD RS SEQ features an integrated skew equalizer. Skew is the color misalignment present in twisted pair A/V systems using Category 5, 5e, or 6 cable in which the red, green, and blue video signals arrive to the display at different times. Using Extron's skew equalization technology, the arrival of color signals is synchronized, improving image quality while maintaining full signal integrity.

Benefits of Using Twisted Pair

Because the MTP 15HD transmitters and receivers utilize UTP cable for distribution, they offer considerable advantages in cost, performance, and ease of installation. UTP cable is a fraction of the size of coaxial cable, and much lighter, more flexible, and less expensive, thus providing A/V system designers and installers with an economical, space efficient solution for a variety of applications.



Continued →

MTP 15HD RS Series

MTP T 15HD RS

MTP - Mini Twisted Pair Transmitter for VGA and RS-232

UNIQUE FEATURES

- Input: Female 15-pin HD connector for video and captive screw connector for RS-232
- Output: Female RJ-45 connector
- Pre-peaking circuit for optimizing video signal on long cable runs
- Buffered local monitor output



MODEL

VERSION DESCRIPTION

PART

MTP T 15HD RS	Transmitter	60-652-01
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MTP 4T 15HD RS NEW

Quad MTP – Mini Twisted Pair Transmitter for VGA and RS-232

UNIQUE FEATURES

- Input: Four female 15-pin HD connectors for video and captive screw connectors for RS-232
- Output: Four female RJ-45 connectors
- Four separate transmitters in a single 1U, rack-mountable enclosure
- Pre-peaking circuit for optimizing video signal on long cable runs
- Four buffered local monitor outputs, one for each transmitter



MODEL

VERSION DESCRIPTION

PART

MTP 4T 15HD RS	Quad Transmitter	60-905-01
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MTP RL 15HD RS

MTP - Mini Twisted Pair Receiver for VGA and RS-232 with Loop-Through

UNIQUE FEATURES

- Input: Female RJ-45 connector and female RJ-45 connector for buffered UTP loop-through
- Output: Female 15-pin HD connector for video and captive screw connector for RS-232
- Separate variable level and peaking controls
- Buffered UTP output for daisy-chaining up to eight receivers



MODEL

VERSION DESCRIPTION

PART

MTP RL 15HD RS	Receiver w/Loop-Through	60-735-01
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MTP RL 15HD RS SEQ

MTP - Mini Twisted Pair Receiver for VGA and RS-232 with Loop-Through and Skew Equalization

UNIQUE FEATURES

- Input: Female RJ-45 connector and female RJ-45 connector for buffered UTP loop-through
- Output: Female 15-pin HD connector for video and captive screw connector for RS-232
- Separate variable level and peaking controls
- Buffered UTP output for daisy-chaining up to eight receivers
- Independent skew compensation adjustments for each color



MODEL

VERSION DESCRIPTION

PART

MTP RL 15HD RS SEQ	Receiver w/Loop-Through & Skew Equalizer	60-735-02
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Continued →

MTP 15HD RS Series

MTP 15HD RS Series

COMPATIBLE DISTRIBUTION AMPLIFIERS	MODEL DESCRIPTION	PAGE	PART #
MTP DA4	Four Output MTP - Mini Twisted Pair Distribution Amplifier	page 90	60-685-01
MTP DA8	Eight Output MTP - Mini Twisted Pair Distribution Amplifier	page 90	60-686-01
INCLUDED ACCESSORIES	MODEL DESCRIPTION	PAGE	PART #
EPS 1210 B	Extron Desktop Power Supply - 12VDC, 2A, wire	page 694	70-055-01
OPTIONAL ACCESSORIES	MODEL DESCRIPTION	PAGE	PART #
SEQ 100 15HD	Skew Equalizer with 15-pin HD Connectors	page 118	60-676-01
RSB 129	1U 9.5" Deep Basic Rack Shelf	page 820	60-604-01
UTP23SF-4/1000	Enhanced Skew-Free™ A/V UTP Cable	page 726	22-141-03
UTP23SF-4P/1000	Enhanced Skew-Free™ A/V UTP Cable	page 726	22-142-03
PS 123	12VDC Rack Mountable, Multiple Output Power Supply	page 695	60-814-01

SPECIFICATIONS

VIDEO

Gain	Unity
Number/signal type	
MTP 4T 14HD RS	4 sets of proprietary analog signals
All other models	1 set of proprietary analog signals
Connectors	
MTP 4T 14HD RS	4 female RJ-45
All other models	1 female RJ-45

VIDEO INPUT AND LOOP THROUGH — TRANSMITTERS

Number/signal type	1 analog RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, or composite video 1 buffered RGBHV, RGBS, RGsB, RsGsBs local monitor loop through (includes ID bits)
Connectors	2 female 15-pin HD per transmitter
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and for R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	0.3 V to 1.45 Vp-p
Impedance	75 ohms
Horizontal frequency	15 kHz to 130 kHz
Vertical frequency	30 Hz to 150 Hz
Return loss	< -30 dB @ 5 MHz
DC offset (max. allowable)	250 mV

VIDEO OUTPUT — RECEIVERS

Number/signal type	1 set of proprietary analog signals 1 analog RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, or composite video
Connectors	1 female RJ 45 1 female 15-pin HD
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and for R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	0.3 V to 1.45 Vp-p
Impedance	75 ohms
Return loss	< -30 dB @ 5 MHz
DC offset	< ±20 mV with input at 0 offset

SYNC

Input type (transmitter)	RGBHV, RGBS, RGsB, RsGsBs
Output type (receivers)	RGBHV, RGBS, RGsB, RsGsBs
Standards	NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level (transmitter)	3.5 V to 5.5 Vp-p, unterminated
Output level (receivers)	4.0 V to 5.0 Vp-p, unterminated
Input impedance	510 ohms
Output impedance	110 ohms
Max. input voltage	5.5 Vp-p
Polarity	
Transmitter	Positive or negative (follows input polarity)
Receivers	Positive or negative (switch selectable)

CONTROL/REMOTE — EXTERNAL DEVICE (PASS-THROUGH, UNIDIRECTIONAL OR BIDIRECTIONAL)

Serial control port input/output

MTP T 15HD RS	RS-232 via (1) 3.5 mm, 3 pole captive screw connector
Receivers	1 set of proprietary signals on a female RJ-45 jack

Serial control port output/input

MTP T 15HD RS	1 set of proprietary signals on a female RJ-45 jack
Receivers	RS-232 via a 3.5 mm, 3 pole captive screw connector

NOTE: The serial communications link of an MTP RL 15HD RS or MTP RL 15 HD RS SEQ is unidirectional only, transmitter to receiver, unless the receiver's directional jumper has been repositioned. The jumper should be repositioned only when the receiver is the only one in the system.

Baud rates

Up to 38400 bps at up to 600' (183 m) (Higher data rates and distances are possible. Performance will vary based on baud rate and cable length.)

Protocol

Data bits = 5 - 8
Stop bits = 1 or 2
Parity = odd, even, none
Flow control = XON, XOFF, none

NOTE: Protocol is mirrored between the transmitter and the receiver.

Serial control pin configurations Captive screw connectors: 1 = TX, 2 = RX, 3 = GND

GENERAL

MTP 4T 15HD RS:

Power	100 VAC to 240 VAC, 50/60 Hz, 20 watts, internal
All other models:	
External power supply	100 VAC to 240 VAC, 50/60 Hz, external; to 12 VDC, 2 A, regulated
Power input requirements	12 VDC, 0.5 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, unvented
Rack mount	
MTP 4T 15HD RS	Yes, with included mounting brackets, part #70-077-03
All other models	Yes, with optional 1U, 9" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01); 1U, 6" deep rack shelf (RSU 126, #60-190-10; RSB 126, 60-604-10); or VersaTool® 1U, 3" deep rack shelf (RSF 123, #60-190-20; RSB 123, 60-604-20) Also furniture mountable with optional Mini Under-Desk Mounting Kit, part #70-212-01; or projector mountable with optional projector mounting kit, part #70-217-01
Enclosure type	Metal
Enclosure dimensions (Depth excludes connectors.)	
MTP 4T 15HD RS	1.7" H x 17.5" W x 8.5" D (1U high, full rack wide) 4.3 cm H x 44.4 cm W x 21.6 cm D
All other models	1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) 4.3 cm H x 10.9 cm W x 7.6 cm D

Product weight

MTP 4T 15HD RS	6.0 lbs (2.7 kg)
All other models	0.4 lbs (0.2 kg)

Shipping weight

MTP 4T 15HD RS	10 lbs (5 kg)
All other models	2 lbs (1 kg)

Vibration

ISTA 1A in carton (International Safe Transit Association)

Listings

UL, CUL

Compliances

CE, FCC Class A, VCCI, AS/NZS, ICES

MTBF

30,000 hours

Warranty

3 years parts and labor

NOTE: All nominal levels are at ±10%. Specifications are subject to change without notice.